

Range Rules

1. Do not practice without RiderCoach permission.
2. Always wear proper protective gear when seated on the motorcycle.
3. Know the location of the engine cut-off switch and how to use it.
4. Keep the clutch “covered” during early skill development (first riding day).
5. Keep a wrist flat position on the throttle.
6. Always keep a margin of safety, and check all around before moving out.
7. Do not pass other riders unless directed to do so.
8. If you have a problem, move out of the path of travel. A RiderCoach will assist you.
9. Stop smoothly in position if you see or hear a group stop signal.
10. If you do not understand an exercise, or become too uncomfortable to ride safely, notify a RiderCoach.



Basic Rider Course (BRC) Range Rationale

Exercise 1

Motorcycle Familiarization

- This exercise is designed to acquaint a new rider with the major parts and controls of a motorcycle.
- It consists of fitting a participant on his/her course motorcycle, familiarization with parts/controls and operation of key controls, practice in use of the clutch and shift lever (finding neutral), starting/stopping and warming the engine, straddle walking (while practicing front brake use and backing), and positioning the motorcycle for the next exercise.
- Subtleties include multiple mounts/dismounts, introduction of pressing to initiate lean, posture/throttle use, throttle/front brake coordination, shifting technique, and practice in throttle roll-off/front brake squeeze sequence.
- A benefit of this exercise is that participants become comfortable with their motorcycle, and are introduced to various manipulations that will be used later in the course.
- Basic principles of motorcycle operation are introduced, including eyes up, control manipulation, smooth brake use, and clutch/shift lever coordination.
- RiderCoaches divide the riders into 2 (equal) groups for observation and coaching.
- This exercise can be conducted in a stage/parking area

Skill Eval

- The end-of-course skill test is designed to be a realistic, fair measure of a new rider's skill, as well as be efficient to conduct.
- It assesses the basic skill of a limited-space U-turn, the collision avoidance skills of a quick stop and swerving, and the skill commonly associated with single-vehicle motorcycle crashes, cornering.
- The skill evaluations may be run in a different order.
- Riders must follow directions in order to be accurately and fairly scored.
- If a rider does not follow the directions, maximum penalty points for that exercise may be assessed.

Eval 1 & 2 U-turn and Swerve

- A single path of travel is used, and a RiderCoach scores one rider at a time.
- The U-turn, because it is a basic manipulative skill not directly associated with fatal motorcycle crashes, is not given a high scoring weight.
- A rerun of the swerve is allowed for inappropriate speed or for anticipation.

Eval 3 Quick Stop

- This exercise is run one-at-a-time, and utilizes a 20' timing zone.
- One re-run is allowed for inappropriate speed or for anticipating the stop point.

Eval 4 Cornering

- This exercise evaluates cornering capability and technique.
- It utilizes the same path of travel as Exercise 13, Negotiating Curves.
- It may be scored with the path of travel either to the left or to the right.

Exercise 17

Skills Practice

- This exercise is designed to provide continued development of overall control skills.
- It is a capstone exercise that provides practice of important skills, including the collision avoidance skills of straight-line braking and swerving left and right.
- It reinforces basic skills as it mixes at-speed skills and slower speed, manipulative skills.
- The exercise has four paths: two stopping lanes, a U-turn box with a 20' width, and a swerve area that uses the dimensions on the skill test (13' from cue cones to barrier with the cue cones 3' apart).
- Riders first practice quick stop skills in the two stopping lanes, with the other exercises (U-turn and swerve) added after skill and control are demonstrated.
- It is important that each rider maintains a safety margin and demonstrates overall control operation.
- Because riders will next complete the skill test, RiderCoaches should be cognizant of each rider's skill level as well as any potential effects of fatigue.

Exercise 2

Using the Friction Zone

- This exercise is designed to acquaint riders with the procedures and practices to start out, stop, and operate at low speed in a straight line.
- There are 3 parts:
 1. Group rock with individual assistance as needed
 2. Power walking (straddle walking with power)
 3. Straight-line riding.
- Turnarounds are accomplished in neutral.
- Simulated practice is used for emphasis in use of the friction zone.
- The exercise is ended by stopping riders in the middle of the range as a setup for the next exercise.
- Each RiderCoach observes and coaches half of the riders.
- It is important that each rider becomes skilled in clutch operation and braking procedures before proceeding.

Exercise 3

Starting & Stopping Drill

- This exercise is designed to provide practice time for riders in learning clutch/throttle coordination in starting out and stopping. A motor skill development principle is to develop accuracy and control before introducing speed and finesse.
- The exercise has 2 parts:
 1. one to start/stop every 40', the other to ride the length of the range, then stop.
 2. A drill technique is used for repetitive, proprioceptive feedback (a motor skill principle); in other words, each rider develops the skill of starting out and stopping by "feeling" the inputs/responses of the controls.
- The technique of power walking is used extensively so riders are not forced to lift their feet until they are comfortable. Accomplished riders are allowed to discontinue power walking.
- Subtleties of this exercise include the introduction of smooth brake usage when stopping at a "higher" speed, stopping in a slight curve, turning from a stop, and familiarity with perimeter riding.
- This exercise provides the key benefit of riders learning basic motor skill operation in controlling the motorcycle.
- Riders are at ease with later exercises as basic control is at least minimally mastered

continued on next page...

Exercise 16

Avoiding Hazards

- This exercise is designed to develop collision avoidance skills.
- It complements the previous exercise in that obstacles are now to be avoided, and the "lane change" is now quick.
- There are two parts to this exercise and riders remain in two groups.
- Part I has the RiderCoaches signal riders to swerve left or right, and Part II adds a stop signal to the swerve (for a total of three choices).
- This follows a natural developmental process and it introduces a "real world" reaction time to crash avoidance skills.
- The cone weave dimensions upon the return to the end of the line are again 30' x 3'.
- Simulated practice is used to emphasize keeping the upper torso upright during the swerve.
- The dimensions of the critical cones in the swerve are 15' from cue cones to barrier; cue cones are set 3' apart.
- It is important that each rider demonstrates overall control when responding to RiderCoach signals before proceeding.

Exercise 15

Changing Lanes and Crossing Obstacles

- This exercise is designed to develop proficiency in crossing over obstacles and to provide practice in changing lanes.
- It is a 2-part exercise.
- First, riders practice crossing over obstacles (four 2"x 4s") on the perimeter.
- RiderCoaches need to recognize that participants using cruiser-type motorcycle may need to adjust the technique because they cannot effectively stand up on their footrests.
- Once the objective is achieved, the obstacles are removed and the riders are divided into two groups (which allows more practice time).
- Two lane change areas are set up in the interior of the range.
- Simulated practice is used to remind riders how the turn signal switch operates and to emphasize the blind spot check.
- Each long side of the range is used as a return path and uses a 30' x 3' offset weave.
- It is important that each rider is able to cross an obstacle and execute a proper lane change before proceeding.

Exercise 3 continued

Starting & Stopping Drill

- As with most exercises that develop basic skills, there is some awkwardness in the beginning as riders struggle controlling low speed instability, but as skill develops, smoothness and confidence become evident.
- Achieving the objective lays the groundwork for development of the finer skills of operating a motorcycle.
- RiderCoaches avoid coaching minor errors (within the context of maintaining a low risk, positive learning environment), and coach individual riders as appropriate.
- Riders learn the finer skill of clutch/throttle coordination primarily from feedback of the results they experience.
- RiderCoaches use normal evaluative techniques as needed.
- It is important that each rider demonstrates adequate clutch, throttle and brake use coordination before proceeding.

Exercise 4

Shifting & Stopping

- This exercise is designed to have riders learn to shift gears. This is accomplished in a straight line.
- Added to the path of travel is a perimeter turn and 2 clutchcontrol lanes.
 - The perimeter turn serves as an introduction to turning more sharply
 - the clutch control lanes provide the opportunity for riders to fine-tune clutch/ throttle coordination.
- A subtlety of this exercise is that a “mix” pattern is used, and riders must cooperate in merging with each other prior to entering the middle of the range, which is used for clutch-control practice.
- RiderCoaches coach the first ride in the middle of the range then move to focus on the shifting process. For most of the exercise, they coach the shifting and stopping portion of the exercise, and keep a watchful eye on the perimeter turns, clutch-control lanes, and stopping in line.

Exercise 14

Stopping Quickly in a Curve

- This exercise is designed to develop the skill of stopping quickly in a curve by straightening first, then stopping quickly in a straight line.
- Two 90-degree curves are used.
- This provides a crisscross traffic pattern as riders move to the opposite line, requiring real-world time and space judgment.
- RiderCoaches allow riders to practice the skill on their own, coaching by correction and providing encouragement as necessary.
- No signals are given as to when to stop, so riders can determine their own degree of difficulty with minimal interference (a motor skill development principle).
- Simulated practice is used to introduce the stopping technique.
- If a rider chooses 2nd gear to ride into a curve, be sure 1st gear is used to start out from a stop.
- It is important that each rider demonstrates overall control when stopping quickly in a turn before proceeding.

continued on

next page...

Exercise 13

Negotiating Curves

- This exercise is designed to develop the technique for effective cornering.
- Two different curves are used.
- The first is a 90-degree curve while the second is a 135-degree curve.
- Having two different curves adds to the judgment and skill
- required.
- A 135-degree curve is utilized so that a rider must extend the handlebar pressure for a longer time period. Second gear is used for both curves.
- RiderCoaches may initially observe and coach near the entry point of the curve, and later (as soon as reasonable) move to the stop point to coach the overall technique.
- This second curve (135 degrees) happens to be the path of travel in the skill test.
- It is important that each rider demonstrates smooth and precise cornering technique before proceeding.

Exercise 4 continued

Shifting & Stopping

- Riders are likely to stop in a slight turn as they stop to wait their turn in line. This technique was already experienced in Exercise 3, Starting & Stopping Drill. Utilizing this path of travel provides significant practice time in the development of basic skills, and minimizes wait time in lines.
- Riders are kept busy with basic skills development activities.
- Specific coaching is not provided in the middle of the range unless a safety problem exists—a rider develops on his/her own as the results of the manipulation of the controls provides the necessary feedback.
- A parking area is used to stage for the first time in this exercise.
- It is important that each rider demonstrates overall control and clutch use, shifting and braking before proceeding.
- Additionally, each rider should have the ability to recognize and maintain a safety margin.

Exercise 5

Adjusting Speed & Turning

- This exercise is designed to allow riders develop the basic skills of adjusting speed and turning.
- This is the first exercise to provide extended opportunities to ride without having to stop.
- Here the fun factor increases as riders enjoy the benefits of acquiring basic manipulative skills.
- Riders may use 2nd gear as this provides smooth operation with less throttle sensitivity.
- The perimeter is used extensively at first, then riders are coached into the weave pattern.
- The weave pattern is different on each side; one is a 20'-weave and the other is a 30'-weave. This varies the control inputs and feedback provided the riders; that is, they practice and gain feedback in multiple paths of travel.
- RiderCoaches are active in their assessment of safety and skill development, but allow riders the freedom to develop control adjustments.
- The exercise is reversed. This can be accomplished in a variety of ways, but one suggestion is to stop riders in a straight path and then perform a U-turn (providing yet another opportunity to develop basic skill in the context of real riding). Riders have already performed a similar maneuver when they practiced the perimeter turn from the stop and turned up the middle in Ex. 4, Shifting & topping.
- It is important that each rider demonstrates an ability to adjust speed and maintain overall control

Exercise 12

Cornering Judgment

- This exercise is designed to add cornering finesse as it requires additional rider judgment.
- The path of travel includes lanes on the long sides of the range and two exit lanes in the middle.
- Riders practice the slow/look/press/roll technique as they adjust the entry speed for the exit lane they choose.
- RiderCoaches have riders start individually and coach by correction as needed.
- The exercise is reversed to allow practice in both directions.
- It is important that each rider demonstrates overall motorcycle control when adjusting speed for cornering before proceeding.

Exercise 11

Pressing to Initiate Lean

- This exercise is designed to focus on the effects of counter steering.
- To this point counter steering has been subtly developed.
- Because pressing to initiate lean is a critical skill to realize and is difficult to explain, this exercise provides the opportunity to emphasize the technique.
- A repeated split is used; this is a technique that allows half the group to be coached verbally as they observe the other riders practicing (a motor skill principle), and to complete the path of travel two separate times.
- Simulated practice is used to ensure the technique is understood prior to riding.
- A subtlety of this exercise is that the weave is set at two different dimensions.
- For the first run the cones are placed in a straight-line 30' weave; for the second run a 3' offset is used.
- The offset requires an increase in pressure to initiate and control lean (developmental).
- One RiderCoach divides time between coaching the non-riding group and the riding group, while the other RiderCoach is responsible for the middle of the range.

Exercise 6

Controls-Skills Practice

- This exercise is designed to develop additional basic manipulative skills.
- Riders just finished being “stretched” by riding at higher speeds without a lot of low-speed control manipulation, and now are “brought back” to practice low-speed control.
- Two weaves are used: a 20' x 8' on one side and a 15' x 3' on the other. These dimensions have shown to be developmental for new riders, yet engaging and challenging for riders with some experience (a characteristic realized in other exercises throughout the course).
- Additionally, riders practice a left and right perimeter turn (introduced in Ex. 4, Shifting & Stopping), and a clutch-control lane (Note that middle cone inside the perimeter turn is moved slightly).
- An added feature to vary control manipulation and feedback is a pause-n-go. Riders slow without stopping, providing further feedback from brake operation and throttle/clutch use.
- RiderCoaches must use judgment in the timing of their coaching.
- Rider-specific coaching is used when a rider reaches a plateau in her/his development or when a major skill is not being accomplished (clutch/throttle jerking, safety margin violations, eyes down, speed too fast or slow, etc.).
- This is another exercise that keeps things moving with little wait time. Riders are provided extended

Exercise 7

Cornering

- This exercise is designed to provide the development of the basic cornering technique
- of slow/look/press/roll. An oval with a 60' diameter is used. Simulated practice
- assures that the technique is introduced before riding begins. A repeated split (where
- the group is divided into two groups and one group rides while the other group
- observes and is coached, then the groups switch, then the process is repeated) is a
- technique used to accelerate learning and understanding. For example, Group A rides
- both left and right paths of travel while Group B observes and is coached; Group B
- rides both left and right paths of travel while Group A observes and is coached; Group
- A then again rides the left and right paths of travel while Group B observes and is
- coached; then Group B rides again the left and right paths of travel while Group
- A observes and is coached. Also, the exercise is reversed using a U-turn. There is
- extended riding time as the cornering process is critical for rider development. It is
- important that each rider demonstrates the ability to corner smoothly and precisely
- before proceeding.

Exercise 10

Limited-Space Maneuvers

- This exercise is designed to allow riders to develop their abilities in areas with limited maneuvering space.
- Although considered convenience skills, these maneuvers provide riders with additional practice time on basic skills within a practical context.
- The skill of handlebar turn/counter weighting is emphasized, and is introduced with simulated practice.
- Three exercises are provided: a U-turn box, an S-turn, and a perimeter turn.
- The U-turn box has two width dimensions, 24' and 20'. The former is the minimum width of most roadways and the latter provides a goal to increase skill. (The 20' width is used in the skill test.)
- For the perimeter turns, note the middle cone is now in a
- position to form a 90-degree turn. This is to develop the skills associated with turning from a stop at an intersection.
- RiderCoaches provide active assistance when needed, but allow riders the opportunity to practice and develop these skills on their own.
- It is important that each rider demonstrates control in making low speed, limited space paths of travel before proceeding.
- Particular attention should be focused on the U-turn since it develops basic control and is a skill test exercise.

Exercise 9

Stopping Quickly

- This exercise is designed to allow riders to develop their quick-stop capabilities.
- The stop point is several feet prior to the perimeter turns to provide another scenario from which turns must be made in real-world situations. (Earlier in Exercise 4, Shifting and Stopping, the distance was 20' to create a "slow-ride" through the perimeter turn.
- Here a greater approach distance is provided with the idea that braking adjustments may be required to complete the turn.
- Also, note that the middle cone inside the perimeter turn is moved slightly.)
- A feature of this exercise is that a crisscross traffic pattern is used in the middle of the range. Riders practice pause-n-gos while creating a gap for cross traffic.
- Another feature of this exercise is that it has two parts: one is to allow riders to stop as they pass a cue cone; the other is to stop on signal by a RiderCoach. The latter is done to provide riders with an "on cue" scenario to make a quick stop, developing the skill to a deeper level.
- This exercise uses simulated practice to emphasize the quick stop technique.
- As with all exercises, riders are encouraged to start at lower speeds and increase speed as skill develops and comfort levels increase.
- RiderCoaches manage the exercise from the stopping areas, watching the riders as they complete the perimeter turn and crisscross in the

Exercise 8

Matching Gears to Speed

- This exercise is designed to provide practice in shifting between 2nd and 3rd gears
- (on a full-size range) to match engine speed to road speed. A clockwise direction is
- used to vary the experience for added development. Engine braking can be coached in
- this exercise. Cue cones are used for shift points, and riders are coached to downshift
- only while going in a straight line. RiderCoaches begin with active coaching to remind
- riders of the techniques, later using as-needed coaching. It is important that each rider
- demonstrates smooth clutch use and speed control before proceeding.

Full Size Range Layout

